



# **Sanitary Sewer Overflow (SSO) Reduction Program: Fiscal Year 2011 - 2012 Update**

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**State Water Resources Control Board**

**January 8, 2013**

**Board Meeting, Item #3**

# Overview

1. The Sanitary Sewer Systems Waste Discharge Requirements (SSS WDRs)
2. Spill Data and Trends
3. Participation Compliance
4. Compliance and Enforcement Activities

# SSS WDRs

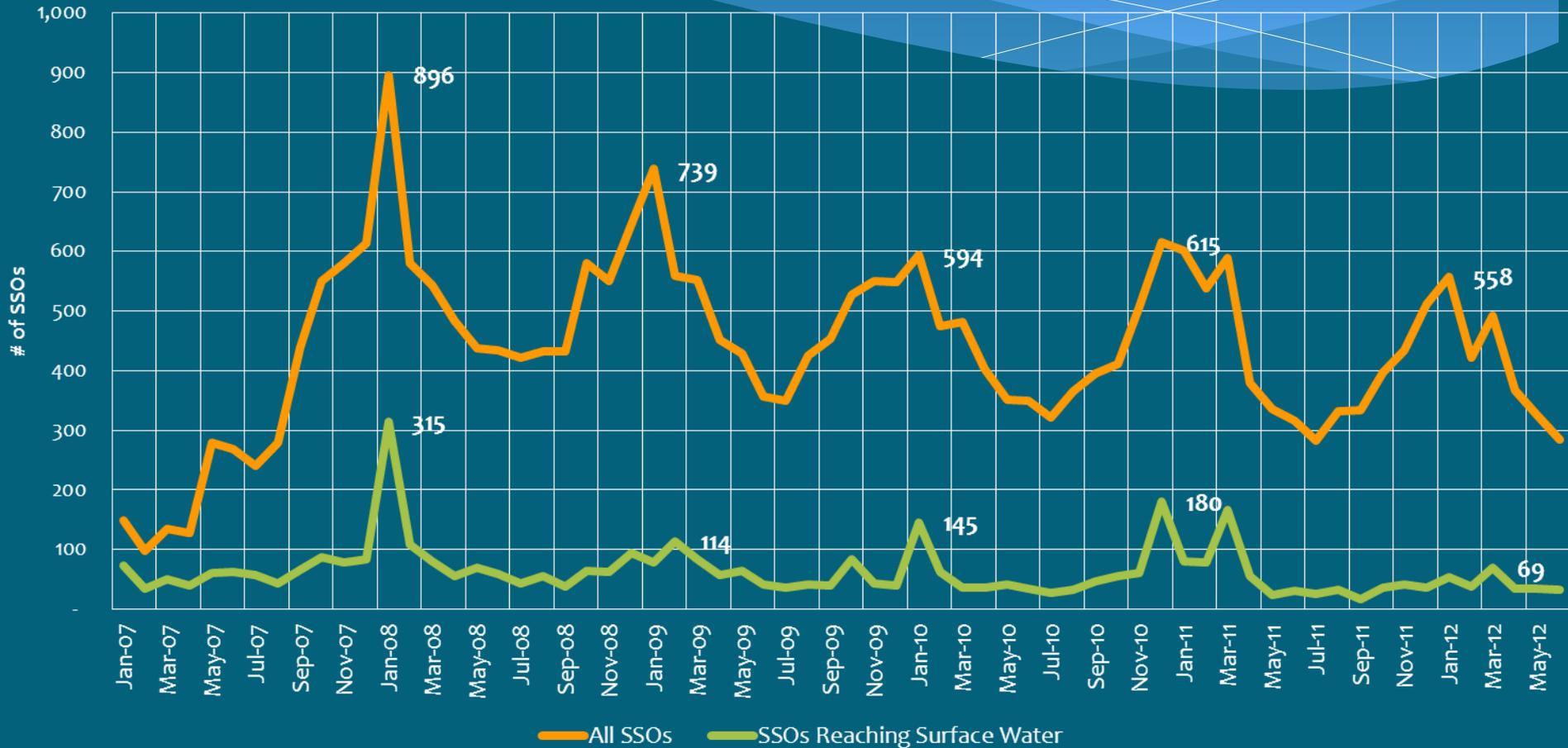
- Applies to publicly-owned SSS over One mile in pipe length
  - 1,081 currently enrolled
- Requires Reporting of SSOs
  - Spills of untreated sewage upstream of sewage treatment plant headworks
  - Treatment plant and permitted combined sewage overflow not regulated
  - Private lateral sewage discharges not regulated, enrollees are encouraged to report them
- Requires enrollees to develop a Sewer System Management Plan for their sanitary sewer system
- San Diego Regional Water Board has additional requirements for sanitary sewer systems in addition to the statewide WDRs

# Statewide Spill Data and Trends

- June 2012:
  - 1081 enrollees
  - ~72% reported one or more spills
  - ~28% have never reported a spill
- January 2007 and June 2012:
  - ~ 29,000 SSOs reported
    - 14% of SSOs reached surface water
  - ~128 million gallons of raw sewage spilled
    - 81% of volume spilled reached surface water
- ~5% (57) enrollees are responsible for 90% of total volume spilled since program inception
- Trends in spill characteristics remain unchanged:
  - ~91% of spills are < 1,000 gallons
  - Roots, fats/oils/grease (FOG), and debris
  - ~2% of total volume spilled resulted from these 91% of spill events
  - ~9% are > 1,000 gallons
  - Leading causes are capacity and structural issues
  - ~98% of volume spilled

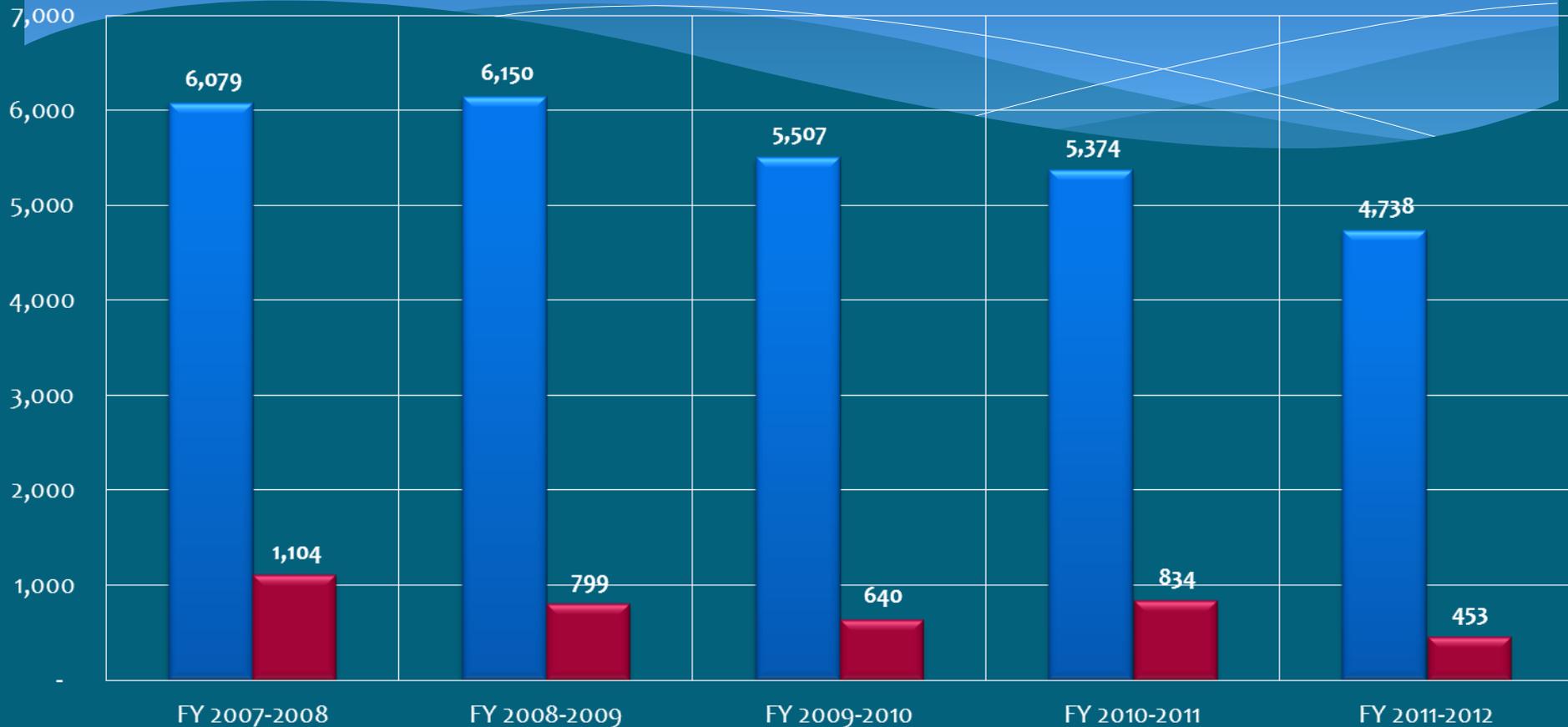
# SSO Reaching Surface Water

## Monthly Trend in Number of SSOs



# SSO Reduction Trends (by number)

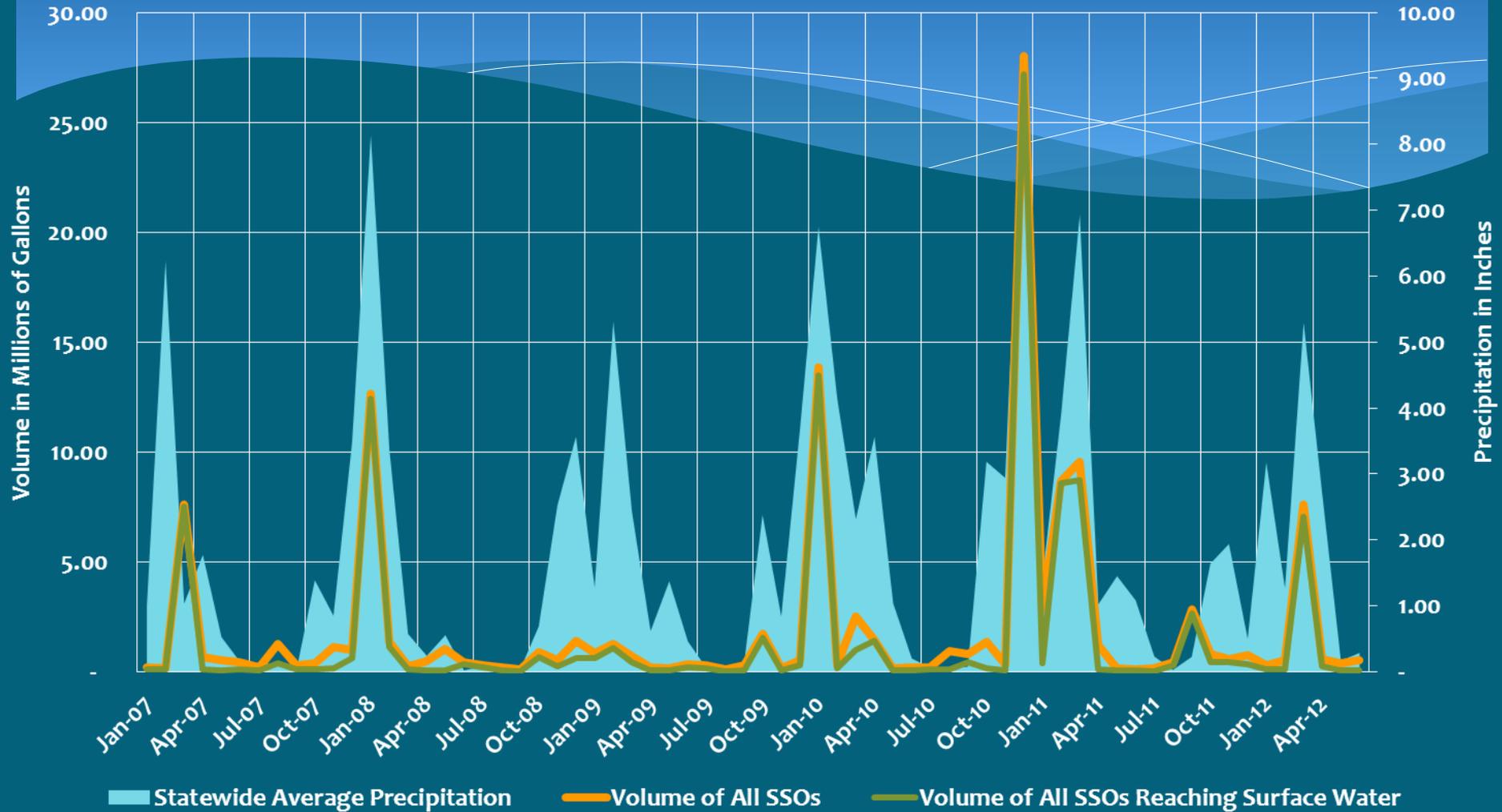
Number of SSO Trend by Fiscal Year



■ Total SSOs   ■ SSOs Reaching Surface Water (from Total)

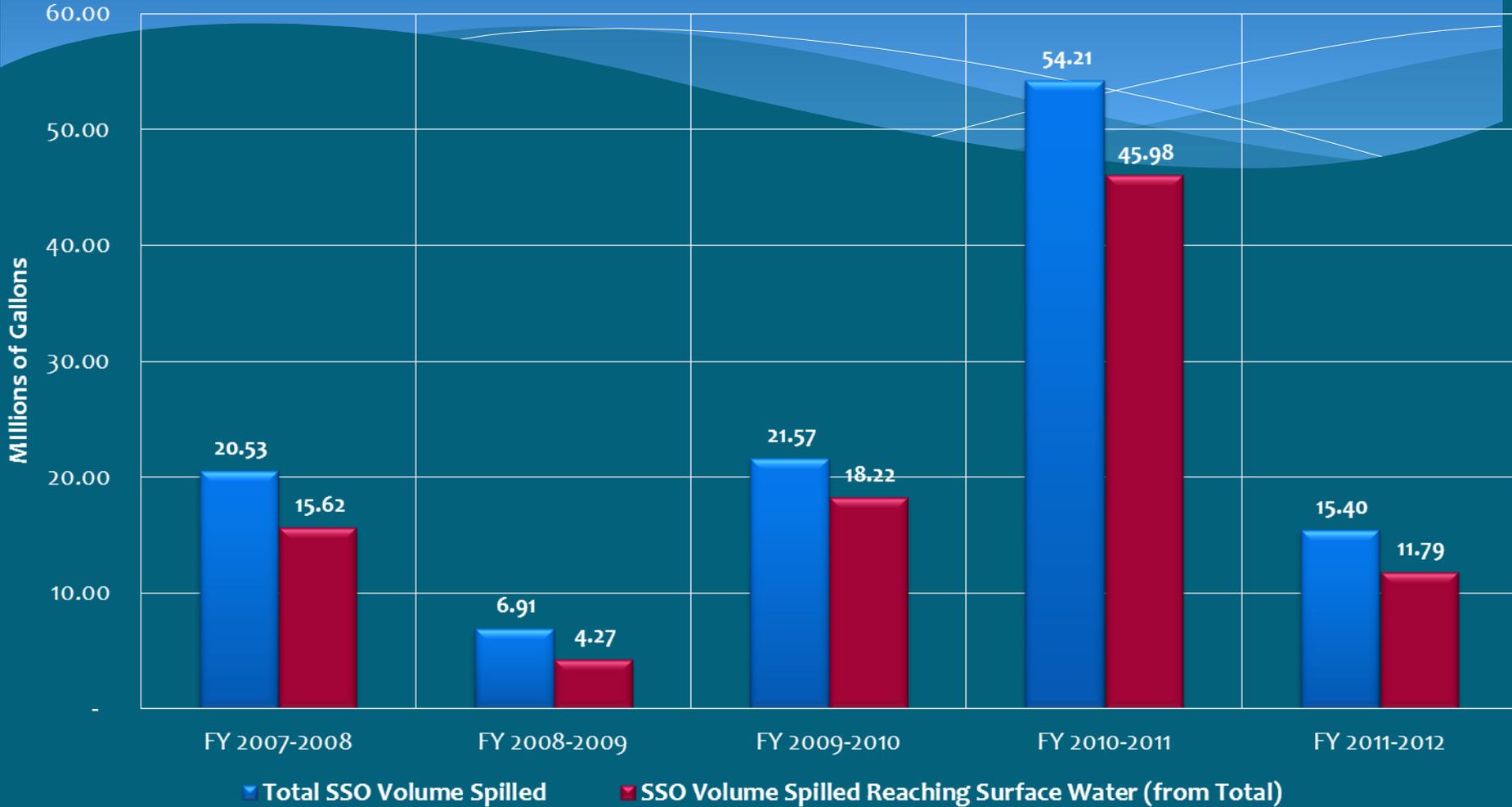
# SSO and Precipitation Data Trends

Monthly Trend in SSO Volume



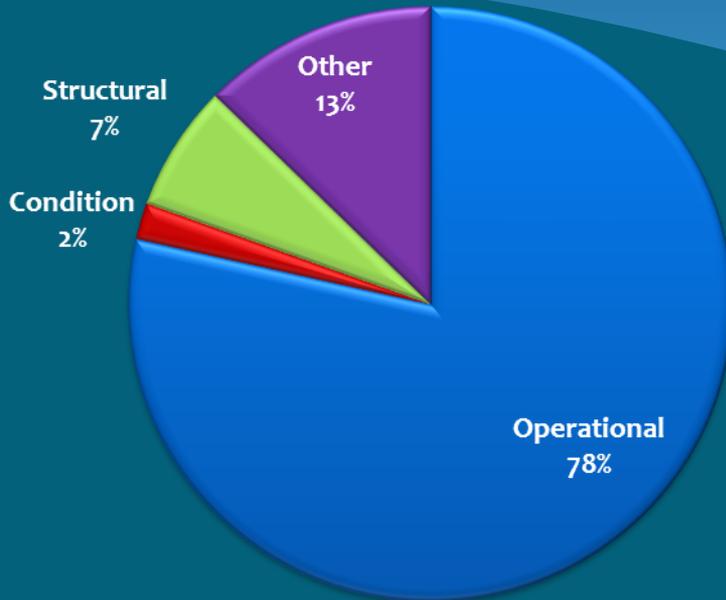
# SSO Reduction Trends (by volume)

SSO Volume Spilled by Fiscal Year

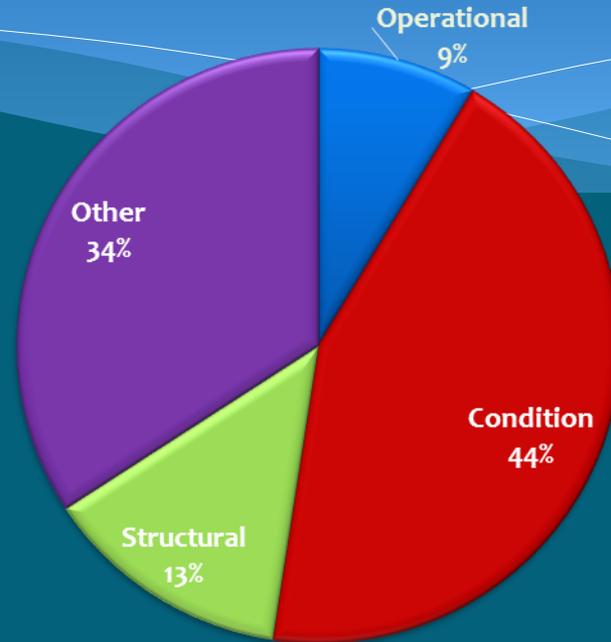


# Causes of SSOs

Percent of SSOs by Cause



Percent of SSO Volume by Cause



**Operational** - Includes SSOs caused by Debris, FOG, Roots;  
**Condition** - Includes SSOs caused by flow exceeded capacity and Rain flow exceeded capacity;  
**Structural** - Includes SSOs caused by pipe structural failures and pump station failure;  
**Other** - Includes SSOs caused by Vandalism, surcharged pipe, operator error, and unknown.

# Regional Spill Data and Trends

- January 2007 and June 2012:
  - Central Valley – Sacramento, San Francisco Bay, and Los Angeles Water Boards regions have the highest SSO rates
    - Approximately 52 percent of publicly-owned SSS
  - San Francisco and San Diego Water Boards regions have the highest SSO volume rates
    - Correlated with magnitude of precipitation, indicating significant inflow and infiltration/infrastructure issues

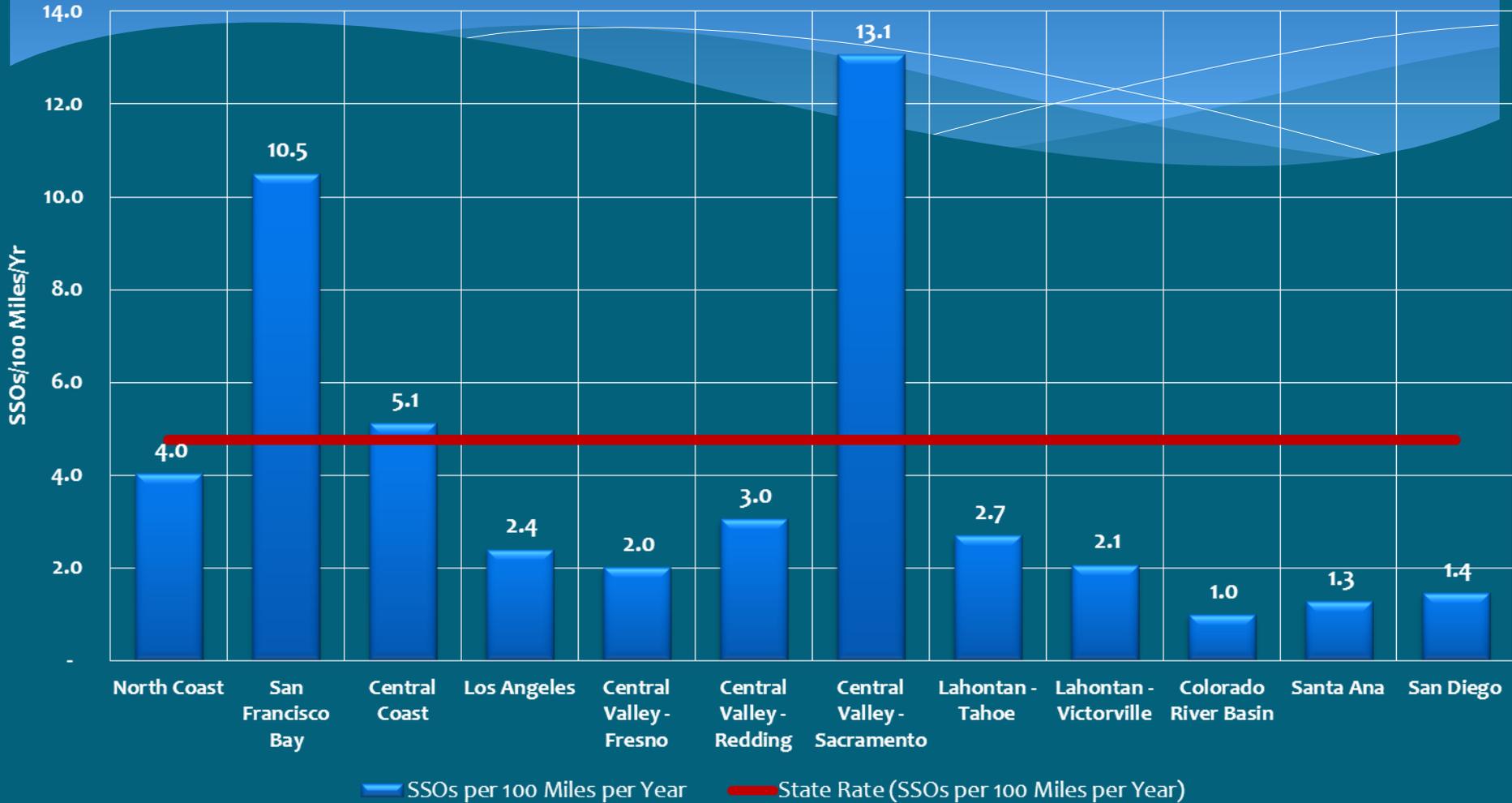
# Regional Spill Data and Trends

Number of SSO by Region



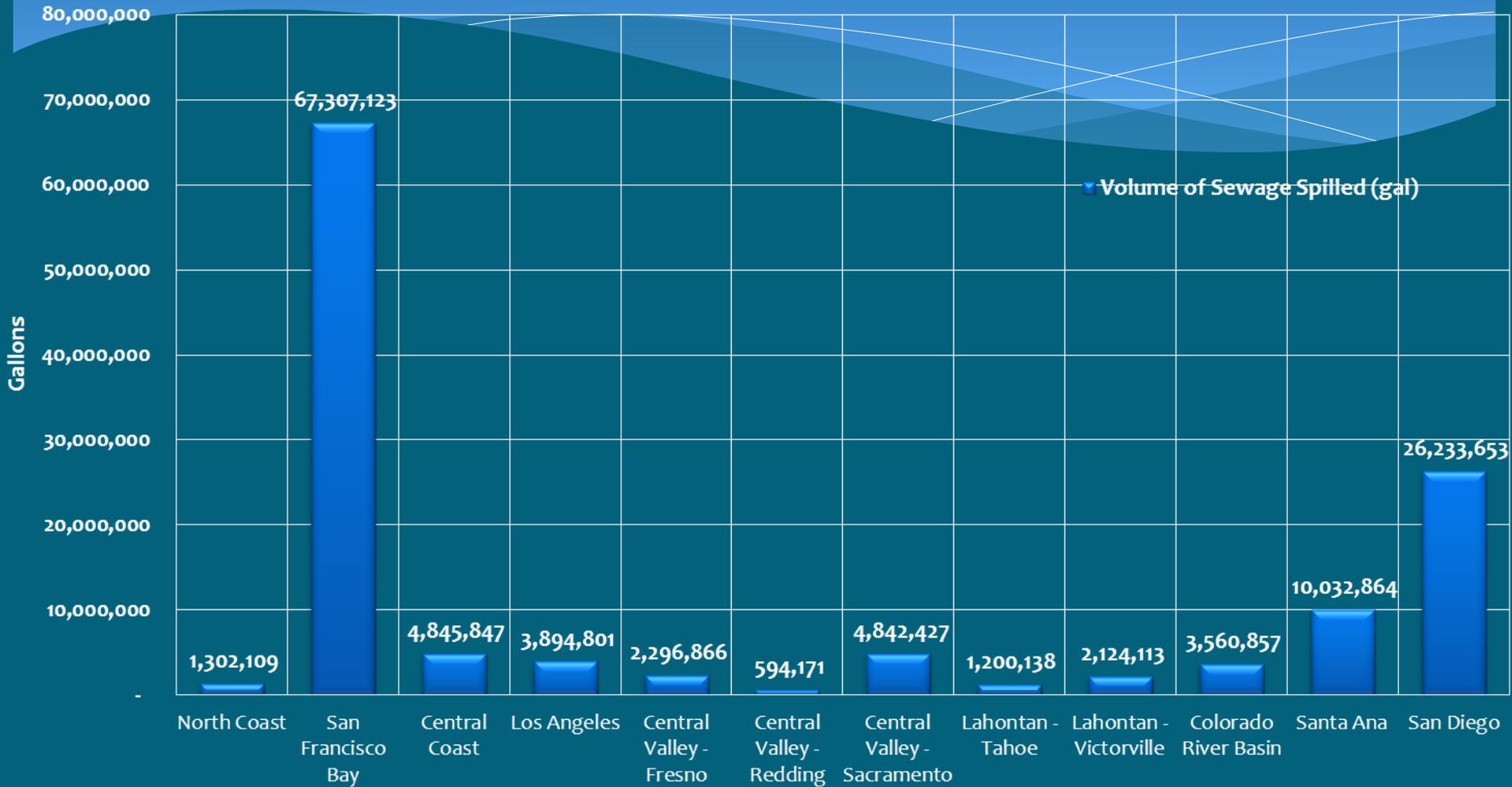
# Regional Spill Data and Trends

## SSO Rate by Region



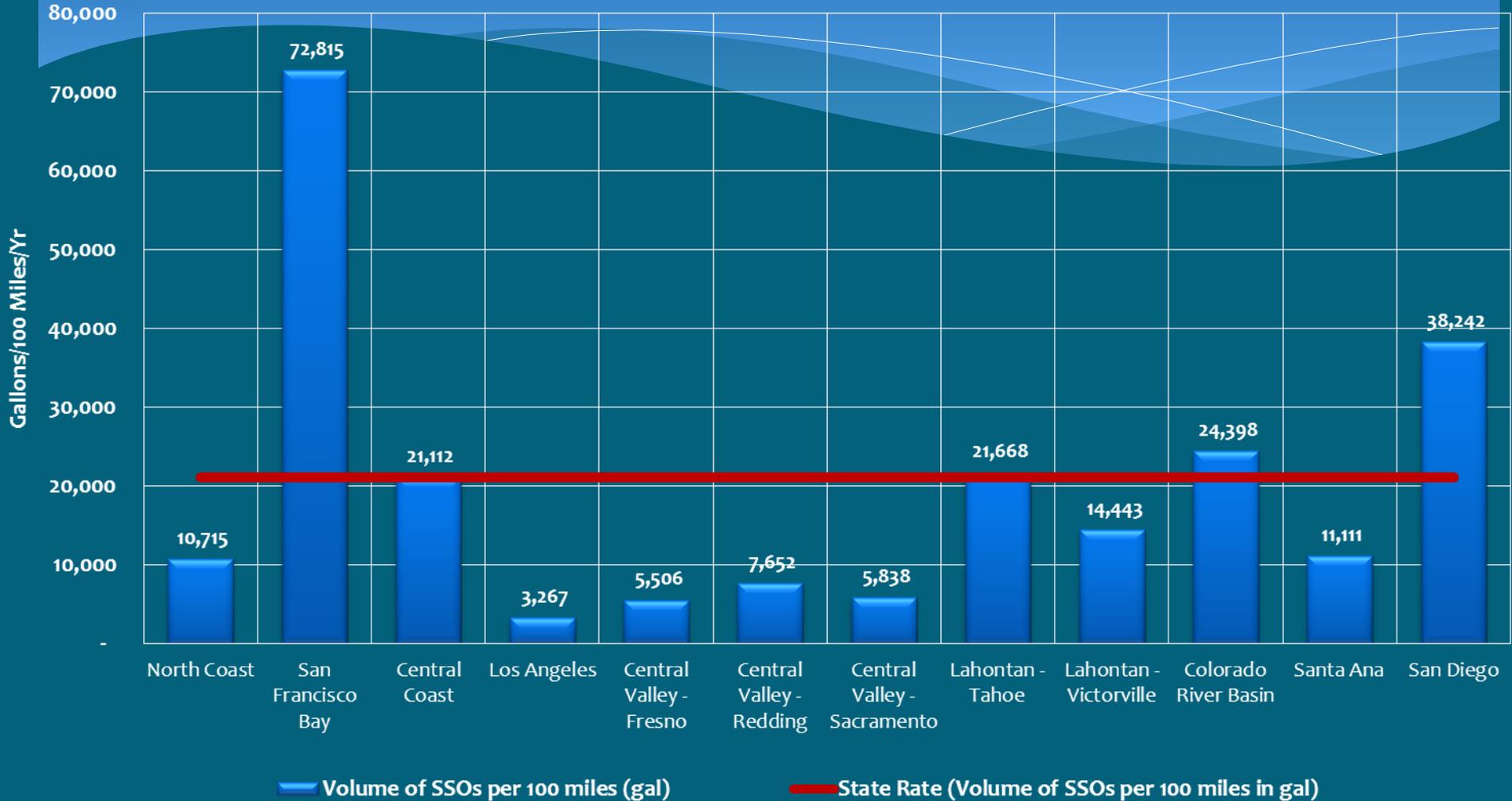
# Regional Spill Data and Trends

## Volume of SSO by Region



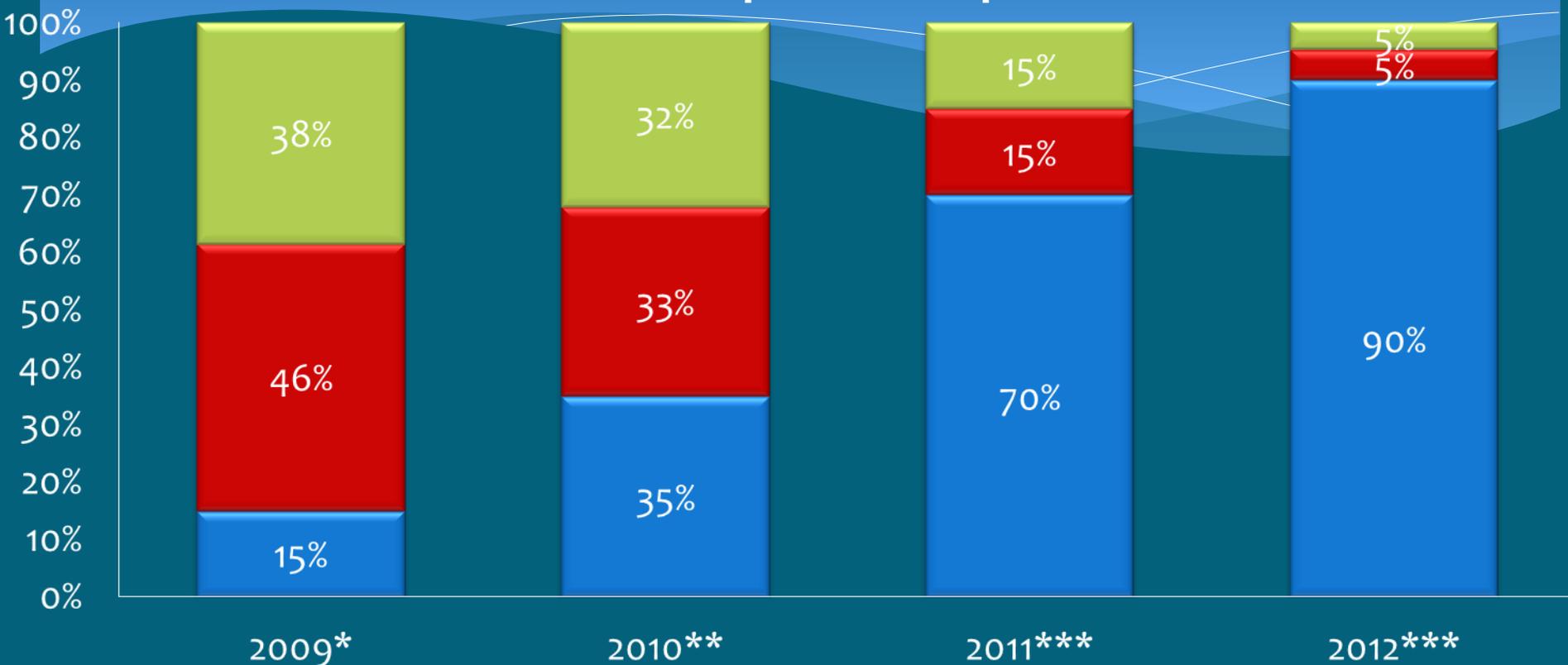
# Regional Spill Data and Trends

## SSO Volume Rate by Region



# Current Compliance

## SSMP Development Compliance



■ Completed SSMP ■ Certified Some SSMP Elements ■ No SSMP Elements Certified

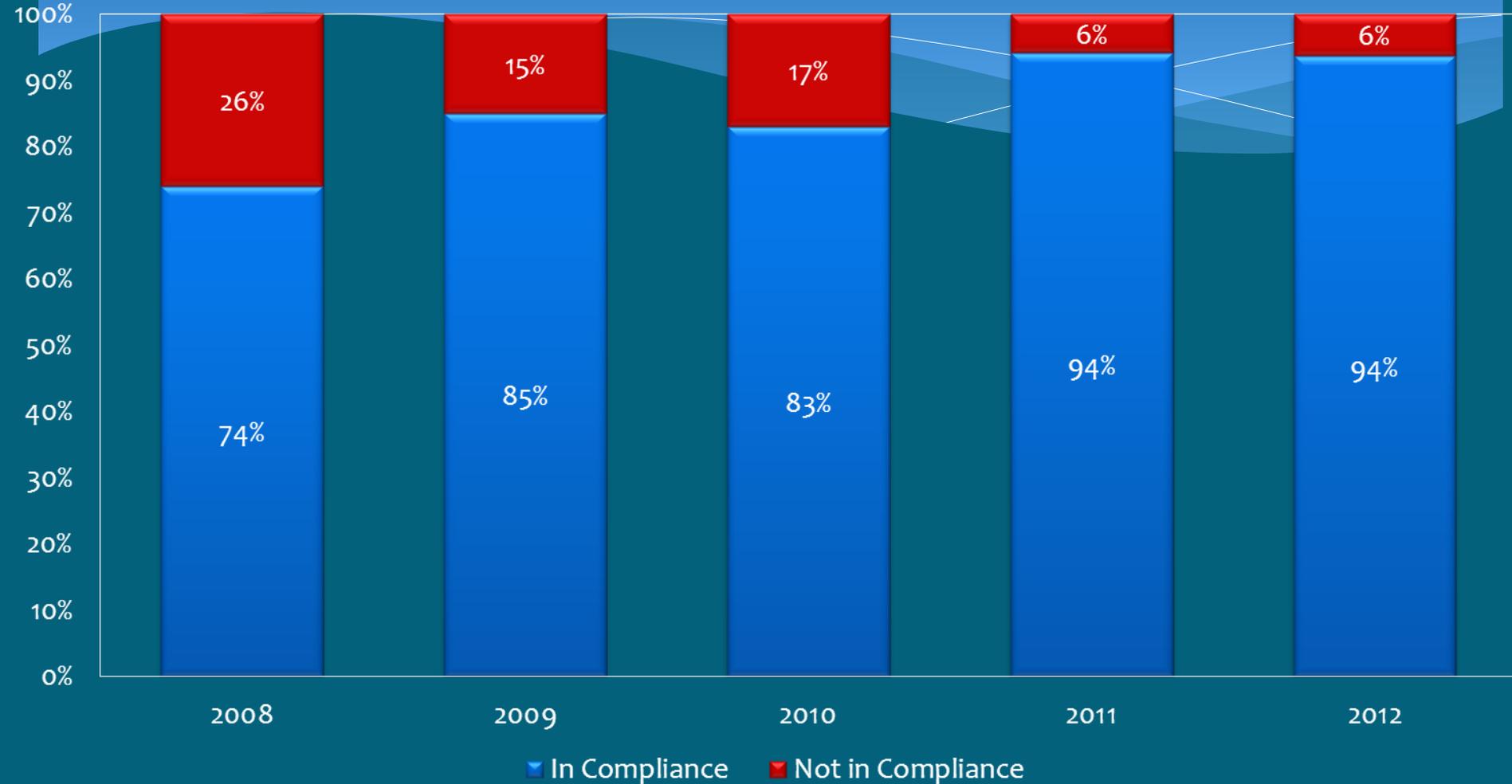
Notes: \* Data used for 2009 - 91 % had elements for which certification was not yet due.

\*\* Data used for 2010 - 39% had elements for which certification was not yet due.

\*\*\* Data used for 2011 - All SSMP elements were due.

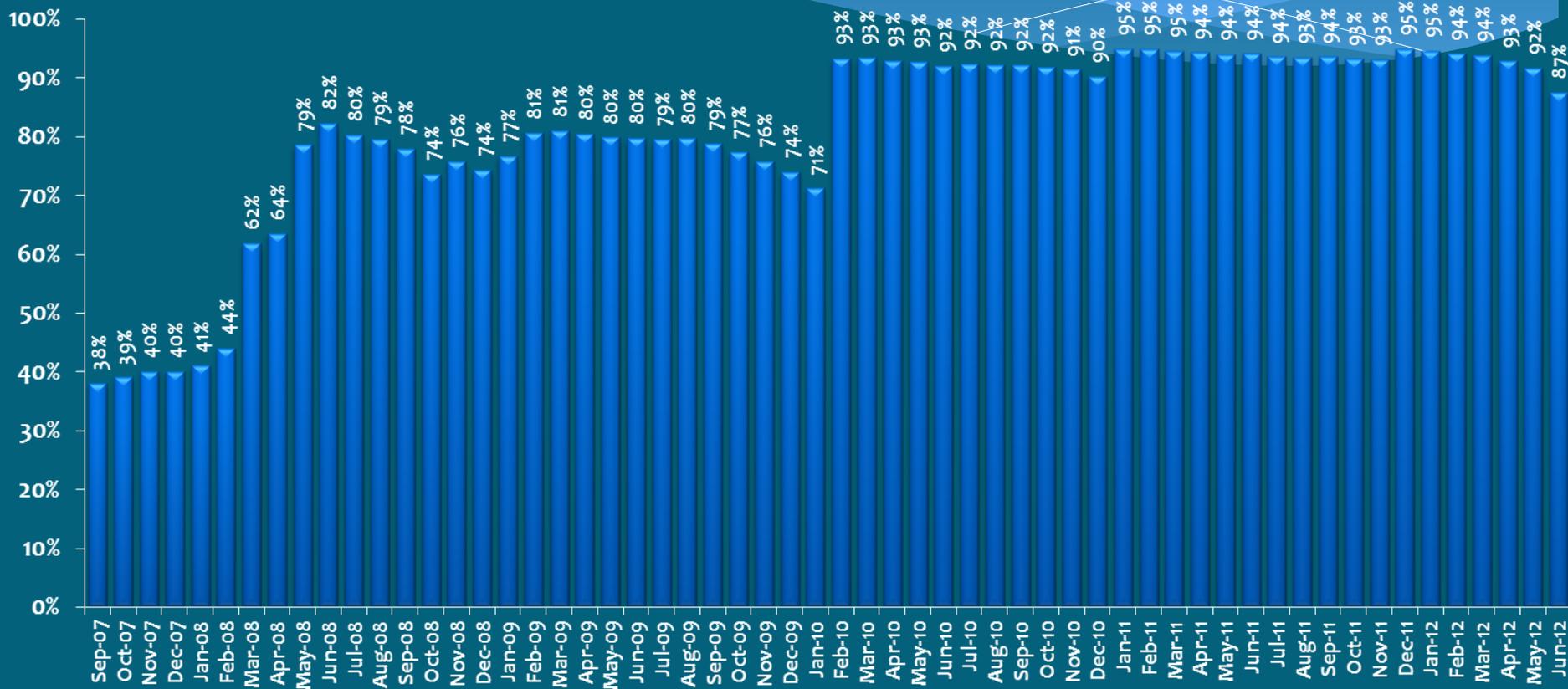
# Current Compliance

## Sanitary Sewer System Questionnaire Compliance



# Current Compliance

Enrollees Reporting SSOs or No-Spill Certifications (September 2007 to June 2012)  
Overall Average = 81%, FY 2011 - 2012 93%

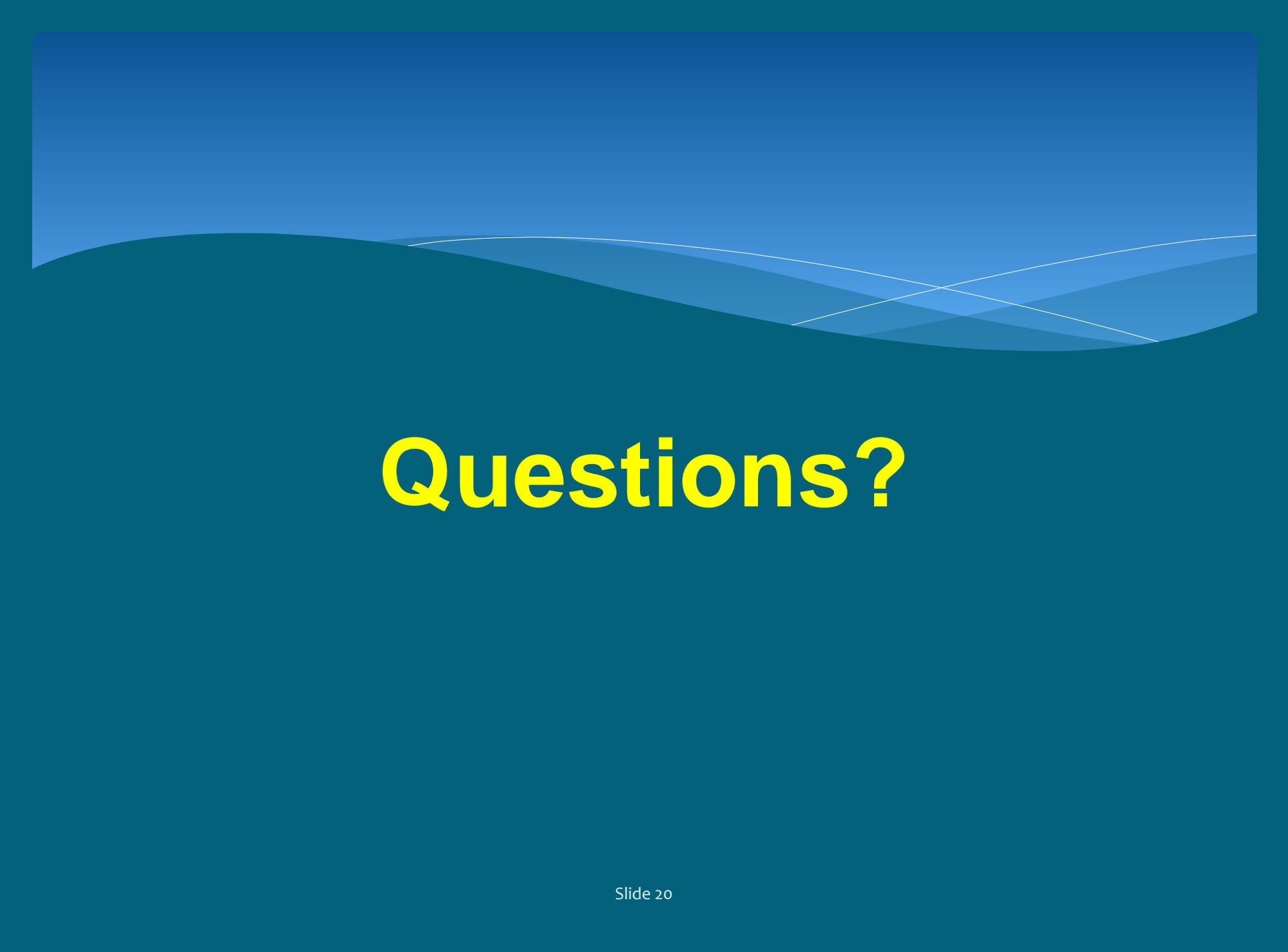


# Compliance and Enforcement Activities

- Participation and compliance improvements achieved through enforcement
  - 119 Notices of Violation (NOVs) sent to non-participating enrollees in July 2010
    - 85% return to compliance
  - 148 NOVs sent to agencies that failed to timely certify SSMP elements in CIWQS in April 2012
    - 90% have completed some or all elements of the SSMP
  - Monthly reminders
  - 214 Regional Water Board enforcement actions since January 2011
    - 174 enforcement actions taken in FY 2011 – 2012
- SSS Inspections and Records
  - Office of Enforcement has conducted 50 inspections and 50 record audits since program inception
    - 21 inspections and 50 records audits in FY 2011 – 2012

# Monitoring and Reporting Program (MRP) Reissuance

- January 24, 2012 Workshop
  - State Water Board – amend only MRP
- MRP workshops in Northern and Southern California on August 28, 2012 and August 30, 2012
- Reissuance of MRP expected January 2013



# Questions?